

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME Norchem		EMERGENCY TELEPHONE NO. (815) 942-7301
ADDRESS (Include Street, City, State and ZIP Code) 8805 N. Tabler Road Morris, IL 60450-9988		
CHEMICAL NAME AND SYNONYMS Antifreeze, Ethylene Glycol Base		TRADE NAME AND SYNONYMS All Weather Anti-freeze Coolant
CHEMICAL FAMILY Dihydric Alcohol	FORMULA HO - CH ₂ - CH ₂ - OH	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Ethylene Glycol				90	50 ppm (vapc)
Other Glycols				5	
Proprietary Inorganic and Organic Corrosion Inhibitors				3	

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	325	SPECIFIC GRAVITY (H ₂ O=1)	1.13
VAPOR PRESSURE (mm Hg.)	NA	PERCENT VOLATILE BY VOLUME (%)	NA
VAPOR DENSITY (AIR=1)	NA	EVAPORATION RATE (_____ =1)	NA
SOLUBILITY IN WATER	100%		
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 250°F (Cleveland Open Cup)	FLAMMABLE LIMITS	LeI	UeI
EXTINGUISHING MEDIA Water			
SPECIAL FIRE FIGHTING PROCEDURES None			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

50 ppm for ethylene glycol vapor.

EFFECTS OF OVEREXPOSURE

SEE ATTACHED

EMERGENCY AND FIRST AID PROCEDURES

If swallowed: Induce vomiting. For method, call a physician, a hospital emergency room, or a Poison Control Center. Always see a physician.

SEE ATTACHED

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

X

INCOMPATIBILITY (Materials to avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS
POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

X

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Dilute with water.

WASTE DISPOSAL METHOD

Incinerate or liquid disposal according to local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

NA

VENTILATION

LOCAL EXHAUST

SPECIAL

MECHANICAL (General)

To keep TLV at or below 50 ppm

OTHER

PROTECTIVE GLOVES

Yes if handling hot glycol

EYE PROTECTION

Safety Goggles

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Protect against extreme freezing conditions. Freeze point is approximately 0°F.

OTHER PRECAUTIONS

EFFECTS OF OVER EXPOSURE

Swallowing: Brain, kidney, liver damage, may be fatal.
Inhalation: Narcosis, nausea and vomiting.
Eye Contact: May cause minor eye irritation.
Skin: No effect.

FIRST AID

First Aid Procedures

Eyes: Irrigation of the eye immediately for five minutes is good safety practice.
Consult medical.

Skin: Wash off in flowing water. Decontaminate clothing and accessories before reuse. Good personal hygiene..

Inhalation: Remove to fresh air if effects occur. Consult medical.

Ingestion: Toxic by ingestion. Induce vomiting immediately. Call a physician and/or transport to emergency facility.

NOTE TO PHYSICIAN

Stain for evidence of corneal abrasion or injury. May cause neurologic signs and symptoms. May cause kidney damage. May cause electrolyte imbalance. Suggest baseline CBC, UA, and 12 test. Suggest baseline electrolytes. Consult standard literature. Use of alcohol may be helpful.